

Project Report Set E

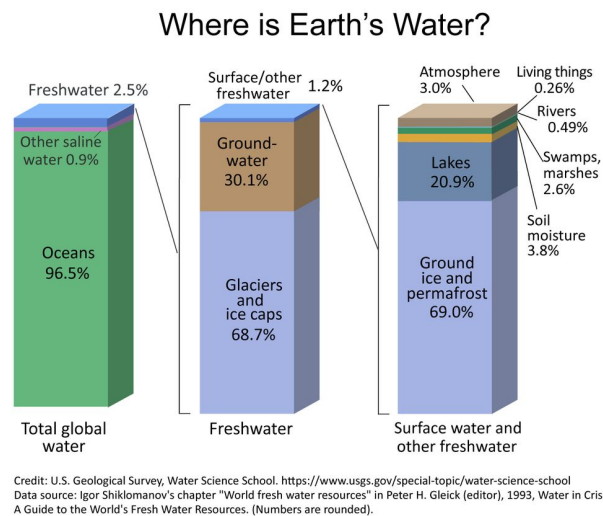
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For this project we will be working to establish an understanding of the interactions between the spheres in relation to the water we have here on earth. Especially focusing on the atmospheric effect on the hydrosphere through rain and how the water on earth affects the biosphere. I want to help the students connect the ideas that though the majority of our planet's surface is water, because of this is saltwater it is not readily usable by us.

To do this we need to create an understanding of the relationship between the hydrosphere (water/saltwater) and our biosphere. Due to its high salt concentration we cannot directly use water from oceans as sources of water for plant life, animals, or humans - if we were to use these it would have detrimental effects on plants and animals alike (biosphere) leading to dehydration as the salt levels draw out water from the cells and is damaging to life.

So how do we solve these issues? Desalination of water requires large amounts of energy, time, and financial resources, our fresh water sources are very limited depending on location, geography, and a variety of variables. Because of this we need to find a way to better limit our water usage and understand that humans have an impact on the availability of freshwater and whether it is used to its full potential or is wasted. Some of our sources for freshwater will be from lakes, rivers, and reservoirs. However, our main source comes from rain. Because rain is the main source of freshwater, areas where precipitation rates are low struggle with providing enough freshwater to adequately sustain life.

This image displays a breakdown of all the water found on earth. The purpose of the image is to visually show what proportion of earth's water is fresh usable water. Reading the image from left to right explains where earth's water can be found, most of which being in the oceans. Only 2.5% of earth's water is fresh. The image continues to break down what percent of freshwater is usable showing that an even smaller percent of freshwater can be used. It's often hard to understand the importance of water conservation. However, the image is used to show how finite of a resource water is and the weighted responsibility of taking care of that resource.



Link to video : <https://www.usgs.gov/media/images/distribution-water-and-above-earth>